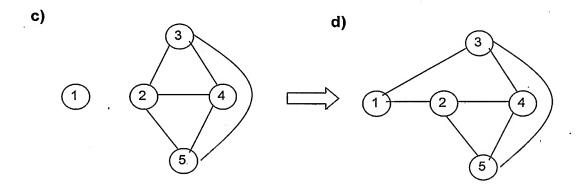


How a new link is created between two nodes (Node 1 and 2) when both nodes can still create a new link. a) The network before Node 1 received a Notify message about Node 2, and b) The network after Node 1 successfully created a new link in response to the Notify message.



How a node (Node 1) inserts itself in an existing link (between Node 2 and Node 3) because Node 2 already had the maximum number of links. c) The network before Node 1 received a Notify message about Node 2, and d) The network after Node 1 successfully changed an existing link into two new ones in response to the Notify message.

## Figure 2

WO 2005/057427 PCT/GB2004/005212 4/18 300 receive Notify msg with: address of sender node address of subject node value of notify level 301 302 yes is my number of links < L? already have subject as link? 315 yes no 303 yes already have subject as spare? send subject a LinksQuery msg 316 , no 304 yes await Links msg from subject is my number of spares < S? 318 no 305 no is my number of links < L? select replace: a random spare 320 yes 306 is subject's number of links < L? decrease notify level 321 yes 307 no add subject as unconfirmed link no is notify level > 0? 322 308 \_yes send AddLink msg to subject send Notify msg about subject with notify level to replace 309 319 is my number of links < L-1? remove replace as a spare J no yes 310 317 select other: a random link of subject that is not a link of me add subject as a spare 311 add subject as unconfirmed link 312 add other as unconfirmed link . 313 send a ChangeLink msg about other to subject 314 send a ChangeLink msg about subject to other

done

Figure 3

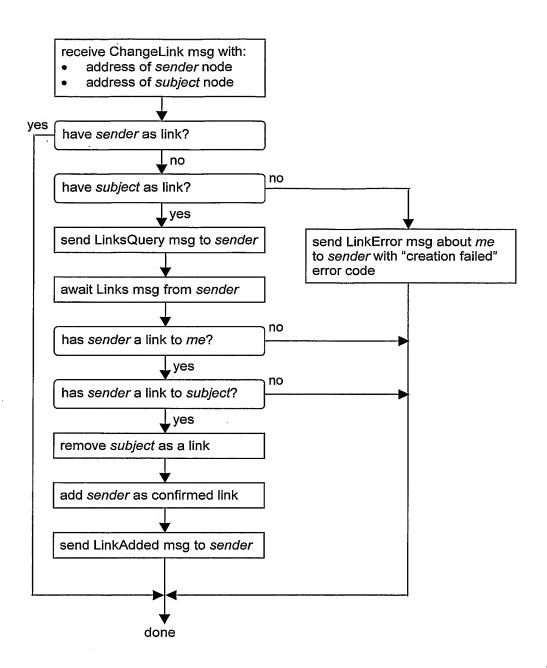


Figure 4

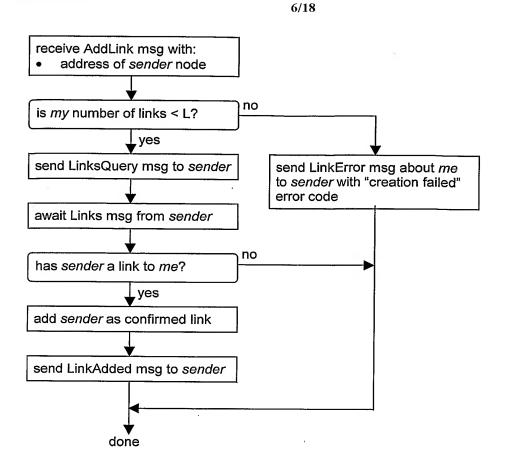


Figure 5

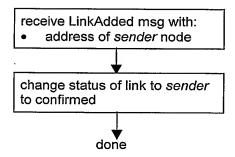


Figure 6

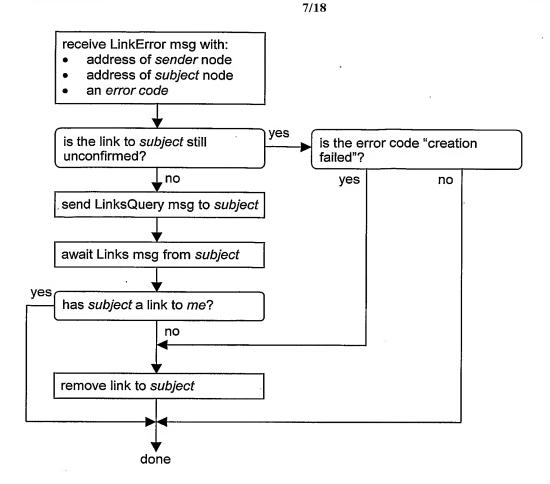
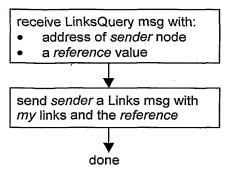


Figure 7



## Figure 8

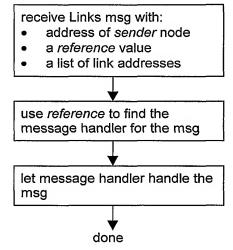


Figure 9

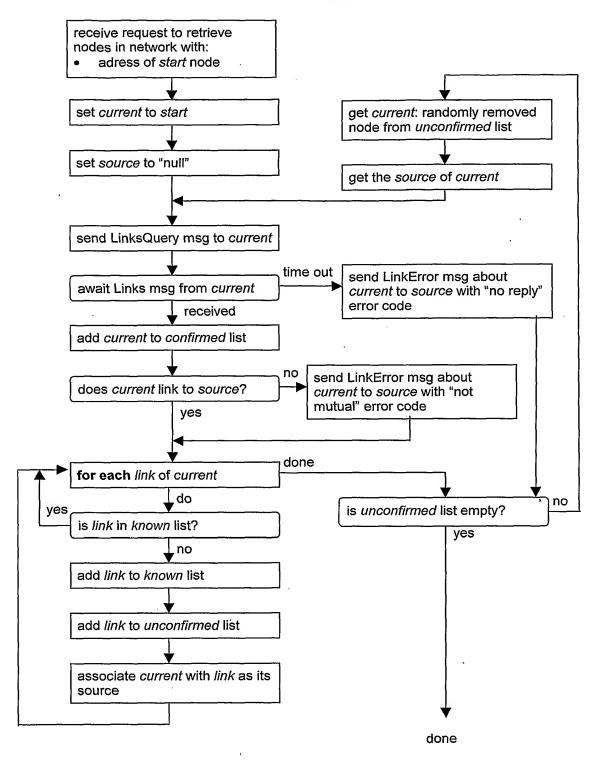
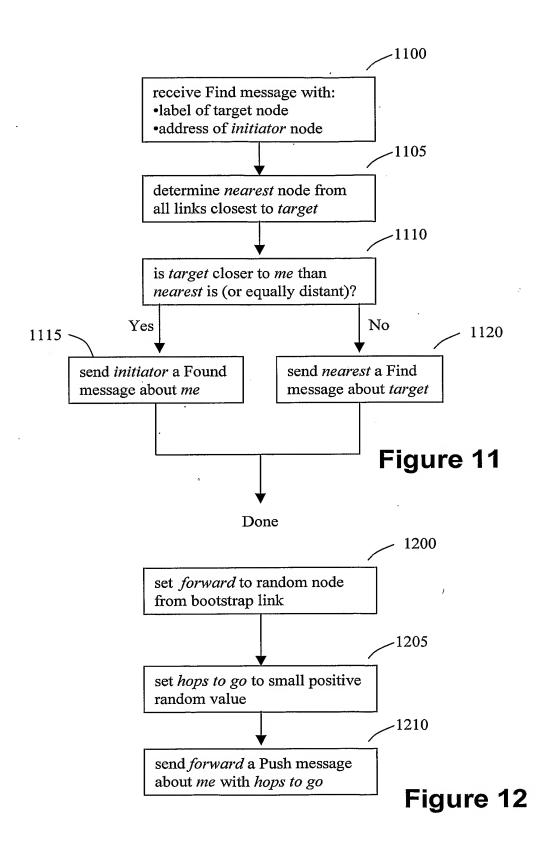
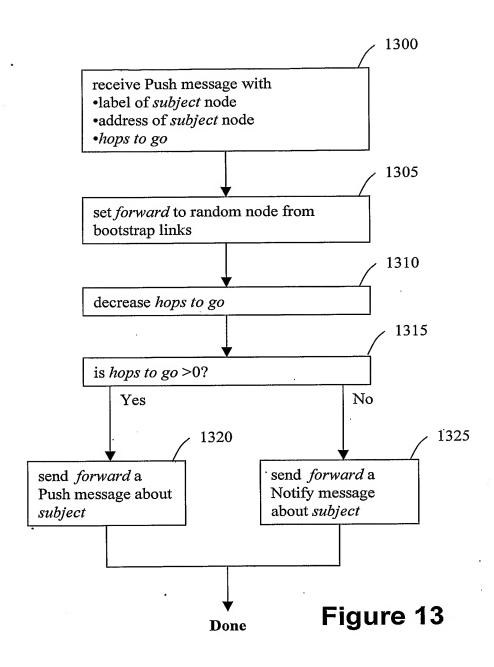
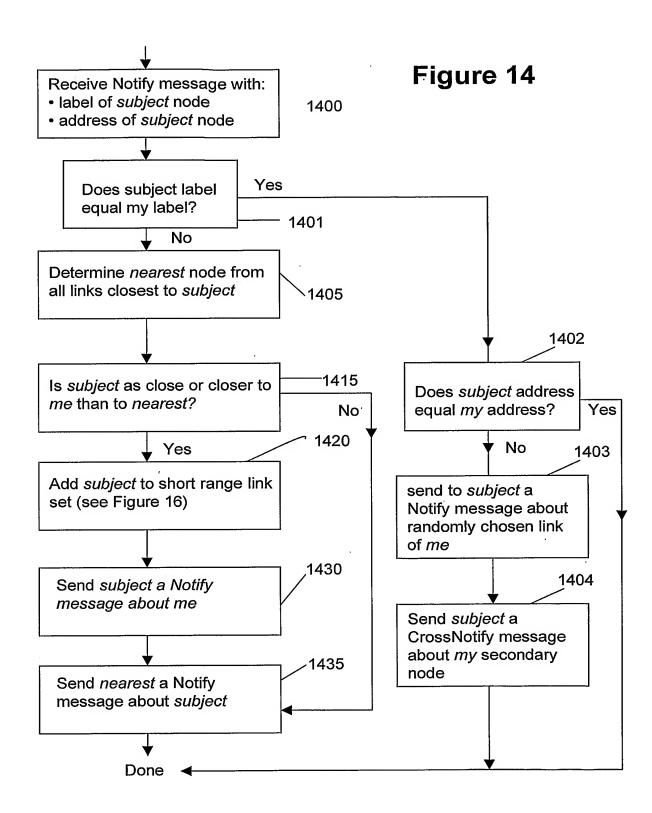
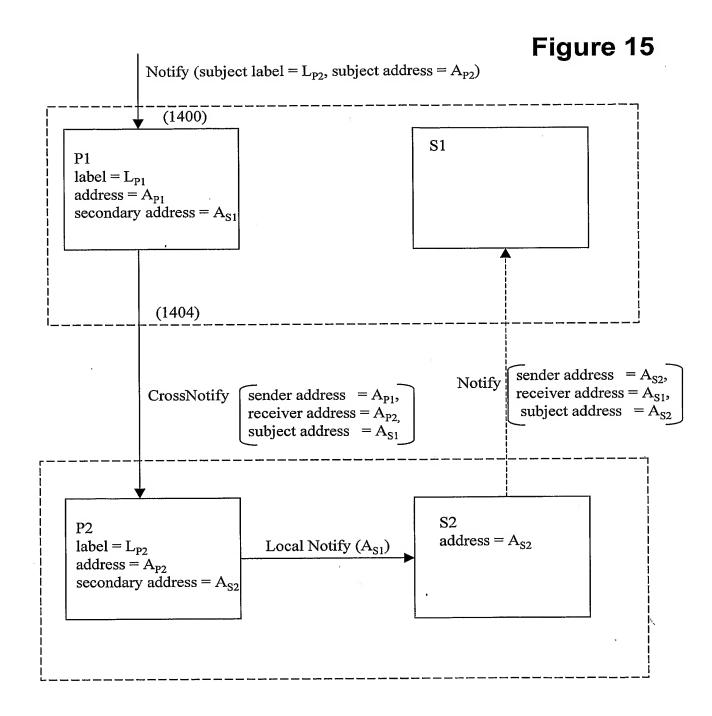


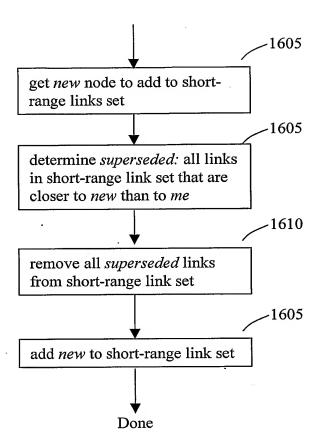
Figure 10





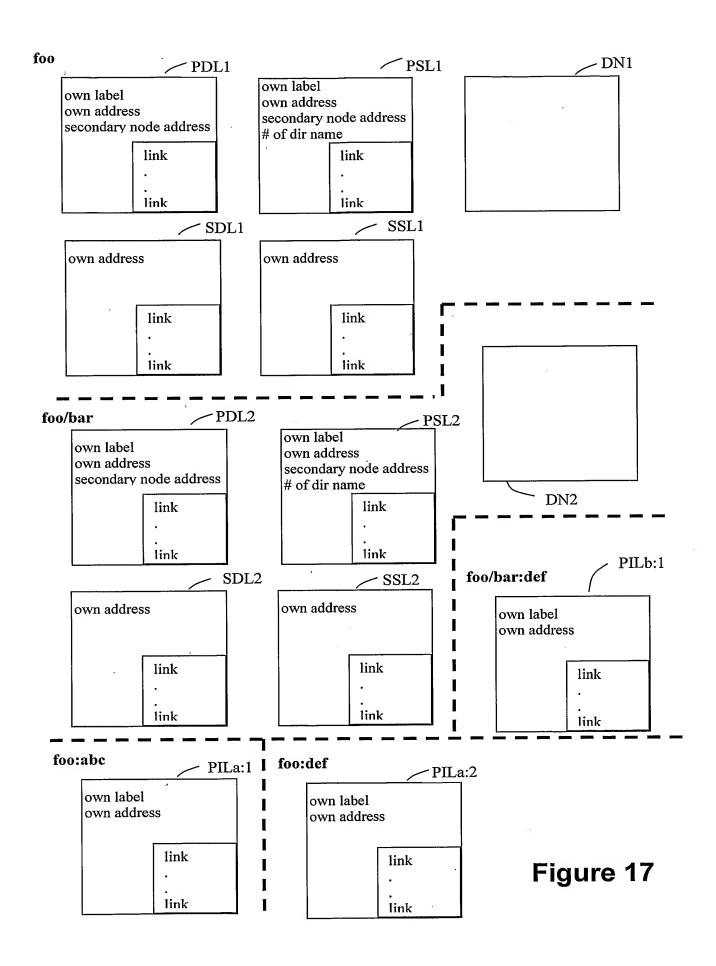






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Figure 16



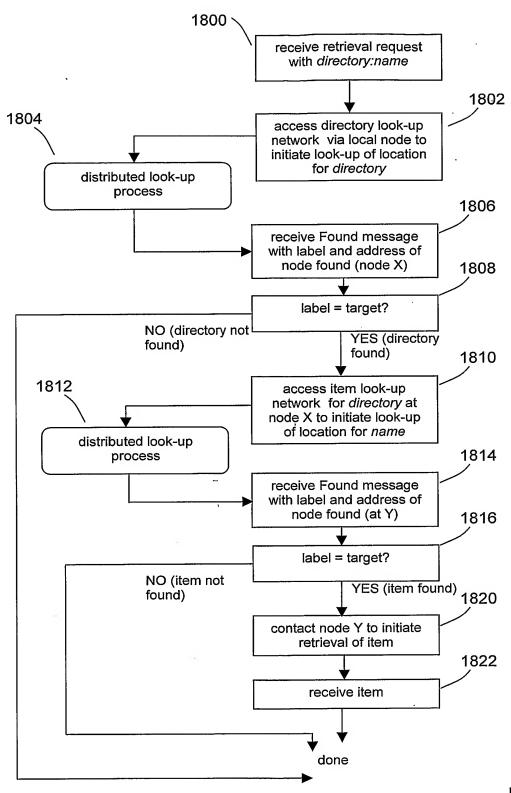


Figure 18

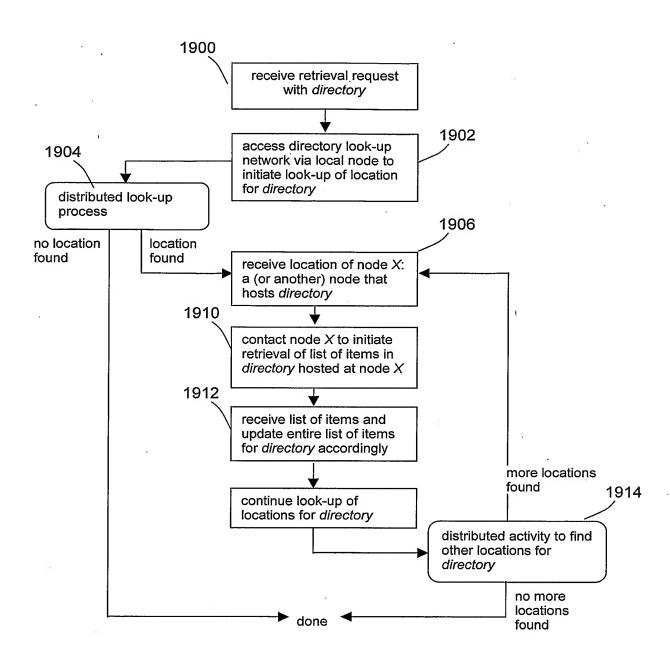


Figure 19

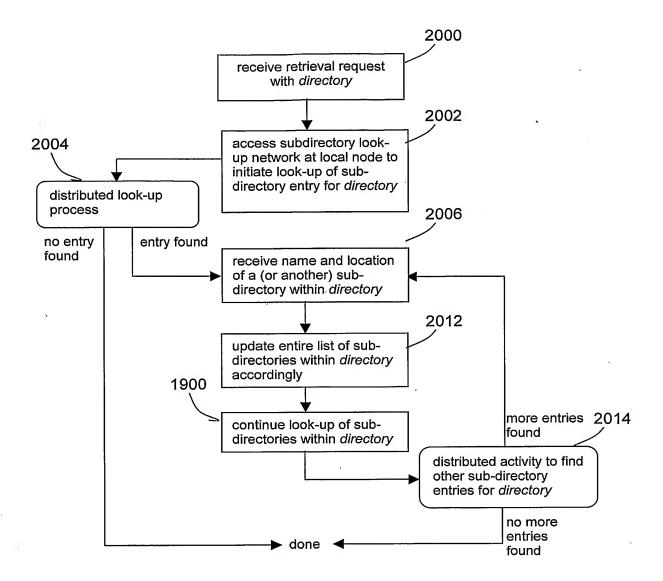


Figure 20